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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/761,257

01/21/2004

Kevin Austin O'Dea

DP-309754

2573

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DELPHI TECHNOLOGIES, INC.
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EXAMINER

SCHWARTZ, CHRISTOPHER P

ART UNIT

PAPER NUMBER

3683

MAIL DATE

DELIVERY MODE

11/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/761,257

Applicant(s)

O'DEA ET AL.

Examiner

Christopher P. Schwartz

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's response filed September 6, 2007 has been received and considered. Claims 1-9 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pueschel et al. '126 in view of Katinas and Busch et al. '033.

Regarding claim 1 Pueschel shows a brake system similar to applicant's, as is readily apparent from the drawings. The bypass valve may still be considered to be USV1 or USV2.

Pueschel et al. lacks specifically mentioning when the pump is shut off.

Noises due to the operation of the pump and the shuttling of the valves between open and closed positions is an old and well known problem in the art. It is therefore desirable to limit unnecessary or excessive operations of these components to reduce noise. Such may be the case when the pump is functioning during ABS or during traction or stability control routines, when the brake pressures in the wheel cylinders are repeatedly increased, maintained, or reduced for specific periods of time.

The reference to Katinas discloses in column 3 lines 1-15 that noise-- due to the ABS pump motor operating against a pressurized master cylinder when the apply valve pulse routine is run – may be reduced by controlling operation of the pump so that it is shut off prior to the valve pulsing routine.

The reference to Busch et al. In col. 2 lines 24-32 also discloses that noise control may be effected by “adjusting the driving of the pump to the position of the shut off (valve) device”. Busch also recognizes the fact that noise is created due to the great pulsations that result when the pressurized medium is delivered against closed valves or valves which are open in a manner not compatible with the delivery rate of the pump.

The examiner maintains the position that one having ordinary skill at the time of the invention would have found it obvious to have applied the teachings of Katinas and Busch to the device of Pueschel et al. '126 to reduce the noise associated with pump operation when the device operates in one of the aforementioned stability control braking modes.

Due to the striking similarity between applicants system and that of Pueschel et al. and Itoh et al limitations of claims 2-5 are considered to be an obvious variation to

Pueschel et al. as modified, since the valving arrangements of Pueschel et al. and Itoh et al. are obviously interchangeable.

Response to Arguments

5. Applicant's arguments filed September 6, 2007 have been fully considered but they are not persuasive. The only reference that was changed out of the prior rejection was the reference to Katinas et al. As stated above in column 3 lines 1-15 Katinas states that noise-- due to the ABS pump motor operating against a pressurized master cylinder when the apply valve pulse routine is run -- may be reduced by controlling operation of the pump so that it is shut off prior to the valve pulsing routine. The examiner maintains that this teaching, combined with the reference to Pueschel et al. meets the claimed limitations, given the strong similarity between applicant's invention and that of Pueschel.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Art Unit: 3683

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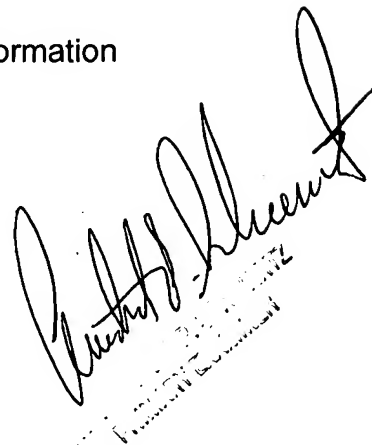
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Schwartz whose telephone number is 571-272-7123. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cps

11/8/07



Christopher P. Schwartz
Examiner, Art Unit 3683